NASA Range Safety Program 2007 Annual Report

NASA Expendable Launch Vehicle Payload Safety Program

NASA Headquarters Office of Safety and Mission Assurance designated a NASA Expendable Launch Vehicle Payload Safety Manager and an Agency Team to establish the NASA Expendable Launch Vehicle Payload Safety Program and develop policy and requirements in support of this safety program. Program policy was placed in the last version of NPR 8715.3, NASA General Safety Program Requirements, paragraph 3.13.4.5.

The team's goal is to develop a program with improved structure and processes for ensuring NASA expendable launch vehicle payloads are consistently designed, transported, processed, tested, integrated with the launch vehicle, and launched safely. The Agency Team is updating the expendable launch vehicle payload safety review process and replacing the current NASA-STD-8719.8, *Expendable Launch Vehicle Payload Safety Review Process Standard*, with the two following documents:

- NASA procedural requirements document, NPR 8715.XX Expendable Launch Vehicle Payload Safety Program
- NASA Standard, NASA-STD-8715.18, Expendable Launch Vehicle Payload Safety Design and Ground Operations Requirements

The new process and requirements will be coordinated and implemented jointly with the Air Force approval process (for launches from Air Force ranges) and will retain the Payload Safety Working Group and a phased safety review approach.

The new NPR 8715.XX, *Expendable Launch Vehicle Payload Safety Program* draft has been reviewed and commented on by each NASA Center Safety and Mission Assurance Director. The NPR has been improved and finalized based on comments from the review and will be submitted in the formal approval process in January of 2008.

The current Draft NASA STD-8719.8 Expendable Launch Vehicle Payload Safety Design and Ground Operations Requirements contains NASA's requirements for safeguarding people and resources (including flight hardware and facilities) from hazards associated with payloads that will fly on expendable launch vehicles, including hazards associated with payload related ground support equipment.

This standard infuses and tailors applicable NASA, industry, and Air Force Range Safety requirements into a single standard for NASA expendable launch vehicle payload projects. This methodology was used to ensure a single baseline requirements document that the Payload Project Office will tailor for both Air Force and NASA acceptance and approval. This NASA Standard should be completed by the summer of 2008 and programmatic activities continue.